

ABSTRACT OF THE DISCLOSURE

A gear shaft assembly for actuating linear movement of an object, including a lower channel assembly, which includes: (a) a threaded rod; (b) a first gear adjacent an end of the threaded rod; (c) a second gear engageable with the first gear and attached to the end of the threaded rod; (d) a mechanism for driving the first gear against the second gear; (e) at least one threaded journal bearing threaded on the correspondingly threaded rod; (f) at least one bearing housing supporting the at least one journal bearing; (g) a movable carrier arm mounted on the threaded rod and attachable to the object; wherein, when the drive mechanism activated, the first gear drives the second gear, rotating the threaded rod, and moving the carrier arm on the threaded rod. A tandem gear shaft assembly and a method for installing a gear shaft assembly and shutter on a window are also included.